Predictive Validity of Aptitude and Personality Measures for Sensor Operator Training Outcomes

With the rapid growth of remotely piloted aircraft (RPA) or unmanned aircraft systems (UAS), the question remains as to just what types of people should operate these systems. Studies on the attributes that predict success for RPA pilots are beginning to emerge (Carretta, 2012; Rose, Barron, Carretta, Arnold, & Howse, 2014), but few published studies have examined predictors of success for RPA sensor operators. Job analysis studies indicate that effective performance as a sensor operator requires similar attributes to those of an RPA pilot (Howse, 2011), but predictive validity evidence is lacking. The purpose of the current study is to evaluate the predictive validity of cognitive aptitude and personality measures for sensor operator introductory and advanced training. Results will assist in the selection of qualified RPA sensor operators, and help clarify the extent to which the sensor operator and RPA pilot roles require similar attributes.